

# COPY

## NEW UNITED STATES UTILITY PATENT APPLICATION TRANSMITTAL

Atty. Docket No.: 17633/1220



### CERTIFICATE OF MAILING UNDER 37 CFR 1.10

I hereby certify that the paper (and any paper or fee referred to as being enclosed) is being deposited with the United States Postal Service using Express Mail to Addressee Service, under 37 C.F.R. Section 1.10, Express Mail Label No. EL592000538US on this date, December 6, 2000, postage prepaid, in an envelope addressed to Box: Patent Application, Commissioner for Patents, Washington, D.C. 20231.

Kathleen M. Williams

Name of Person Mailing Paper

Signature of Person Mailing Paper

Commissioner for Patents  
Box Patent Application  
Washington, D.C. 20231

Enclosed herewith is a new patent application of:

First Named Inventor (or application identifier): Robinson et al.

Title of Invention: **STEM CELLS AND THEIR USE IN TRANSPLANTATION**

Type: ☒ New  
☐ Continuation  
☐ Continuation-in-Part  
☐ Divisional

and includes the following papers:

1. ☒ Specification 81 pages (including specification, claims, abstract)/198 claims (17 independent)
2. ☒ Declaration/Power of Attorney is:  
☒ attached ☐ executed ☒ unexecuted  
☐ NOT included, but deferred under 37 C.F.R. § 1.53(f).
3. ☒ 19 Distinct sheets of ☐ Formal ☒ Informal Drawings
4. ☐ Preliminary Amendment.
5. ☐ Information Disclosure Statement  
☐ Form 1449  
☐ A copy of each cited prior art reference
6. ☐ Assignment with Recordation Cover Sheet.
7. ☒ Priority is hereby claimed under 35 U.S.C. §119(e) based upon the following application(s):

Country	Application Number	Date of Filing (day, month, year)
US	60/169,082	06/12/99
US	60/215,109	28/06/00
US	60/238,880	06/10/00

8. ☐ Priority is hereby claimed under 35 U.S.C. §120 based upon the following application(s):

Country	Application Number	Date of Filing (day, month, year)



# NEW UNITED STATES UTILITY PATENT APPLICATION TRANSMITTAL

Atty. Docket No.: 17633/1220

9. ☐ Priority document(s).
10. ☒ Statement of Small Entity Status, Pursuant to 37 C.F.R. § 1.27.
11. ☐ Microfiche Computer Program (Appendix).
12. ☐ Nucleotide and/or Amino Acid Sequence Submission.  
☐ Computer Readable Copy.  
☐ Paper Copy (identical to computer copy).  
☐ Statement verifying identity of above copies.

13. Calculation of Fees:

FEES FOR	TOTAL CLAIMS	EXCESS CLAIMS	FEE	AMOUNT DUE
Basic Filing Fee (37 C.F.R. § 1.16(a))				\$710.00
Total Claims in Excess of 20 (37 C.F.R. § 1.16(c))	198	178	\$18.00	3,204.00
Independent Claims in Excess of 3 (37 C.F.R. § 1.16(b))	17	14	\$80.00	1,120.00
Multiple Dependent Claims (37 C.F.R. § 1.16(d))	y		\$270.00	270.00
Subtotal – Filing Fee Due				\$5,304.00
Reduction by 50%, if Small Entity (37 C.F.R. §§ 1.9, 1.27, 1.28)	MULTIPLY BY 0.50			\$2,652.00
TOTAL FILING FEE DUE				
Assignment Recordation Fee (if applicable) (37 C.F.R. § 1.21(h))	0		\$40.00	
GRAND TOTAL DUE				2,652.00

14. PAYMENT is:

X not included, but deferred under 37 C.F.R. § 1.53(f).

15. All correspondence for the attached application should be directed to:

Palmer & Dodge, LLP  
One Beacon Street  
Boston, MA 02108  
Telephone: (617) 573-0100  
Facsimile: (617) 227-4420

16. Other: \_\_\_\_\_

Respectfully submitted,

Date: December 6, 2000

By: \_\_\_\_\_

Name: Kathleen M. Williams  
Registration No.: 34,380



Atty. Docket No.: 17633/1220

PATENT

Receipt  
#5

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Joel Habener, et al.  
Serial No.: 09/731,255  
Filed: December 6, 2000  
Entitled: "Stem Cells And Their Use In  
Transplantation"

Examiner: Not yet assigned

Group Art Unit: 1645

Conf. No.: 9070

**CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8a**

I hereby certify that this correspondence (and any paper or fee referred to as being enclosed) is being deposited with the United States Post Office as First Class Mail on the date indicated above in an envelope addressed to Assistant Commissioner for Patents, Office of Initial Patent examination, Customer Service Center, Washington, D.C. 20231.

Kathleen M. Williams

Name of Person Mailing Paper

Signature of Person Mailing Paper

Assistant Commissioner for Patents  
Office of Initial Patent Examination  
Customer Service Center  
Washington, D.C. 20231

**TRANSMITTAL LETTER**

Enclosed for filing the above-identified patent application, please find the following documents:

1. Request For Corrected Filing Receipt (2<sup>nd</sup> Request);
2. Copy of Updated Filing Receipt with wrong information highlighted;
3. Copy of First Request for Updated Filing Receipt;
4. Copy of Patent Application Transmittal along with Declaration/Power of Attorney and;
5. Return Post-Card.

The Commissioner for Patents is hereby authorized to charge any additional fees or credit any overpayment in the total fees to Deposit Account No. 16-0085, Reference 17633/1220. A duplicate of this transmittal letter is enclosed for this purpose.

Respectfully submitted,

Date: August 21, 2001

Name: Kathleen M. Williams

Registration No.: 34,380

Customer No.: 27495

Palmer &amp; Dodge LLP

One Beacon Street

Boston, MA 02108

Tel: 617-573-0100



Atty. Docket No.: 17633/1220 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:	Joel Habener, et al.	Examiner:	Not yet assigned
Serial No.:	09/731,255	Group Art Unit:	1645
Filed:	December 6, 2000	Conf. No.:	9070
Entitled:	"Stem Cells And Their Use In Transplantation"		

**CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8a**

I hereby certify that this correspondence (and any paper or fee referred to as being enclosed) is being deposited with the United States Post Office as First Class Mail on the date indicated above in an envelope addressed to Assistant Commissioner for Patents, Office of Initial Patent examination, Customer Service Center, Washington, D.C. 20231.

Kathleen M. Williams

Name of Person Mailing Paper

Signature of Person Mailing Paper

Assistant Commissioner for Patents  
Office of Initial Patent Examination  
Customer Service Center  
Washington, D.C. 20231

**REQUEST FOR CORRECTED FILING RECEIPT**

Sir:

Applicant requests issuance of a corrected Official Filing Receipt for the above-identified patent application. The filing receipt claim count is incorrect, it should read 198 claims, as indicated on the New Patent Application transmittal filed with the Application on December 6, 2000 (copy enclosed). Also, please note that for some reason the Applicants on the Filing Receipt were changed, we did not request any change of Applicants. The Applicants should read as follows:

Joel E. Habener, Newton Highlands, MA;  
Hendrik Zulewski, Geneva, Switzerland;  
Elizabeth J. Abraham, Quincy, MA;  
Mario Vallejo, Madrid, Spain; and  
Denise L. Faustman, Weston, MA.

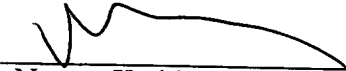
Please add to Filing Receipt in your proper manner.

Serial No.: 09/731,255  
Docket No.: 17633/1220

A copy of the official Filing Receipt is enclosed with the correction(s) highlighted in red.  
It is believed that no further fees are due for this application.

Respectfully submitted,

Date: August 21, 2001



Name: Kathleen M. Williams

Registration No.: 34,380

Customer No.: 27495

Palmer & Dodge LLP

One Beacon Street

Boston, MA 02108

Tel: 617-573-0100



COPY

## UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS  
UNITED STATES PATENT AND TRADEMARK OFFICE  
WASHINGTON, D.C. 20231  
www.uspto.gov

APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
09/731,255	12/06/2000	1645	2789	17633/1220	18	198	17

CONFIRMATION NO. 9070

## UPDATED FILING RECEIPT

\*OC000000006074918\*

Palmer & Dodge, LLP  
One Beacon Street  
Boston, MA 02108

Date Mailed: 05/14/2001

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).



Peter Ian Moss, London, UNITED KINGDOM;  
David Martin Walters, London, UNITED KINGDOM;  
Graham Pointer, London, UNITED KINGDOM;

## Domestic Priority data as claimed by applicant

THIS APPLN CLAIMS BENEFIT OF 60/169,082 12/06/1999  
WHICH CLAIMS BENEFIT OF 60/215,109 06/28/2000  
WHICH CLAIMS BENEFIT OF 60/238,880 10/06/2000

## Foreign Applications

If Required, Foreign Filing License Granted 01/17/2001

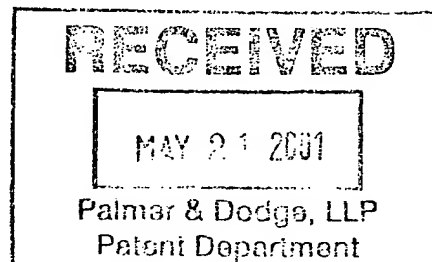
Projected Publication Date: 06/06/2002

Non-Publication Request: No

Early Publication Request: No

\*\* SMALL ENTITY \*\*

Title



Stem cells and their use in transplantation

Preliminary Class

435

---

Data entry by : SALEEKUL, SIRILUCK

Team : OIPE

Date: 05/14/2001

**LICENSE FOR FOREIGN FILING UNDER  
Title 35, United States Code, Section 184  
Title 37, Code of Federal Regulations, 5.11 & 5.15**

**GRANTED**

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

**NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15 (b).

**PLEASE NOTE the following information about the Filing Receipt:**

- The articles such as "a," "an" and "the" are not included as the first words in the title of an application. They are considered to be unnecessary to the understanding of the title.
- The words "new," "improved," "improvements in" or "relating to" are not included as first words in the title of an application because a patent application, by nature, is a new idea or improvement.
- The title may be truncated if it consists of more than 500 characters (letters and spaces combined).
- The docket number allows a maximum of 25 characters.
- If your application was submitted under 37 CFR 1.10, your filing date should be the "date in" found on the Express Mail label. If there is a discrepancy, you should submit a request for a corrected Filing Receipt along with a copy of the Express Mail label showing the "date in."
- The title is recorded in sentence case.

Any corrections that may need to be done to your Filing Receipt should be directed to:



Assistant Commissioner for Patents  
Office of Initial Patent Examination  
Customer Service Center  
Washington, DC 20231



Atty. Docket No.: 17633/1220

**COPY**

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application of: Habener, et al.  
Serial No.: 09/713,255  
Filed: December 6, 2000  
Entitled: "Stem Cells And Their Use In Transplantation"

Examiner: Not Yet Assigned

Group Art Unit: Not Yet Assigned

**CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8a**

I hereby certify that this correspondence (and any paper or fee referred to as being enclosed) is being deposited with the United States Post Office as First Class Mail on the date indicated below in an envelope addressed to Commissioner for Patents, Washington, D.C. 20231.

Kathleen M. Williams

Name of Person Mailing Paper

Signature of Person Mailing Paper

Commissioner for Patents  
Washington, D.C. 20231

**TRANSMITTAL LETTER**

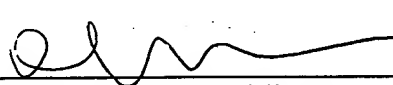
Enclosed for filing the above-identified patent application, please find the following documents:

1. Request for Corrected Filing Receipt; and
2. Return Post Card.

The Commissioner for Patents is hereby authorized to charge any additional fees or credit any overpayment in the total fees to Deposit Account No. 16-0085, Reference 17633/1220. A duplicate of this transmittal letter is enclosed for this purpose.

Respectfully submitted,

Date: February 26, 2001

  
Name: Kathleen Williams  
Registration No.: 34, 380  
Palmer & Dodge LLP  
One Beacon Street  
Boston, MA 02108  
Tel: 617-573-0100



Atty. Docket No.: 17633/1220 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Habener, et al.

Serial No.: 09/713,255

Filed: December 6, 2000

Entitled: "Stem Cells And Their Use In Transplantation"

Examiner: Not Yet Assigned

Group Art Unit: Not Yet Assigned

**CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8a**

I hereby certify that this correspondence (and any paper or fee referred to as being enclosed) is being deposited with the United States Post Office as First Class Mail on the date indicated above in an envelope addressed to Commissioner for Patents, Washington, D.C. 20231.

Kathleen Williams

Name of Person Mailing Paper

Signature of Person Mailing Paper

Commissioner for Patents  
Washington, D.C. 20231

**REQUEST FOR CORRECTED FILING RECEIPT**

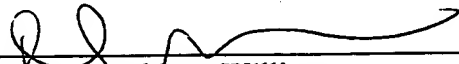
Sir:

Applicant requests issuance of a corrected Official Filing Receipt for the above-identified patent application. The filing receipt should state that the total number of Claims are 198 instead of 127 Claims as stated on the filing receipt.

A copy of the official Filing Receipt is enclosed with the correction(s) highlighted in red. It is believed that no further fees are due for this application.

Respectfully submitted,

Date: February 26, 2001

  
Name: Kathleen Williams  
Registration No.: 34,380  
Palmer & Dodge LLP  
One Beacon Street  
Boston, MA 02108  
Tel: 617-573-0100



## UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS  
UNITED STATES PATENT AND TRADEMARK OFFICE  
WASHINGTON, D.C. 20231  
www.uspto.gov

APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
09/731,255	12/06/2000	1645	0.00	17633/1220	19	<del>127</del> 198	17

CONFIRMATION NO. 9070

## FILING RECEIPT

Palmer & Dodge, LLP  
One Beacon Street  
Boston, MA 02108

\*OC00000005712033\*

Date Mailed: 01/26/2001

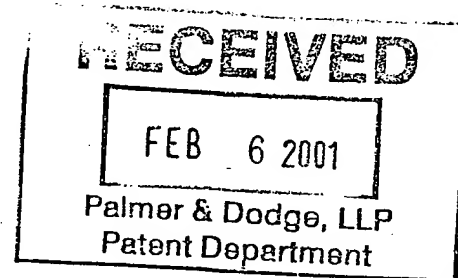
Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the PTO processes the reply to the Notice, the PTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

Joel E. Habener, Newton Highlands, MA;  
Hendrik Zulewski, Geneva, SWITZERLAND;  
Elizabeth J. Abraham, Quincy, MA;  
Mario Vallejo, Madrid, SPAIN;  
Denise L. Faustman, Weston, MA;

## Continuing Data as Claimed by Applicant

THIS APPLN CLAIMS BENEFIT OF 60/169,082 12/06/1999  
WHICH CLAIMS BENEFIT OF 60/215,109 06/28/2000  
WHICH CLAIMS BENEFIT OF 60/238,880 10/06/2000



## Foreign Applications

If Required, Foreign Filing License Granted 01/17/2001

Projected Publication Date: To Be Determined - pending completion of Missing Parts

Non-Publication Request: No

Early Publication Request: No

\*\* SMALL ENTITY \*\*

**Title**

Stem cells and their use in transplantation

**Preliminary Class**

435

---

**Data entry by : PHAM, MINH**

**Team : OIPE**

**Date: 01/26/2001**

**LICENSE FOR FOREIGN FILING UNDER  
Title 35, United States Code, Section 184  
Title 37, Code of Federal Regulations, 5.11 & 5.15**

**GRANTED**

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 36 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

**NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15 (b).

**PLEASE NOTE the following information about the Filing Receipt:**

- The articles such as "a," "an" and "the" are not included as the first words in the title of an application. They are considered to be unnecessary to the understanding of the title.
- The words "new," "improved," "improvements in" or "relating to" are not included as first words in the title of an application because a patent application, by nature, is a new idea or improvement.
- The title may be truncated if it consists of more than 600 characters (letters and spaces combined).
- The docket number allows a maximum of 25 characters.
- If your application was submitted under 37 CFR 1.10, your filing date should be the "date in" found on the Express Mail label. If there is a discrepancy, you should submit a request for a corrected Filing Receipt along with a copy of the Express Mail label showing the "date in."
- The title is recorded in sentence case.

Any corrections that may need to be done to your Filing Receipt should be directed to:

Assistant Commissioner for Patents  
Office of Initial Patent Examination  
Customer Service Center  
Washington, DC 20231



Serial No. 09/713,255 File No. 17633/1220 By: Yan (MBW)

Applicant(s): Habener, et al.

Title: "Stem Cells & Their Use in Transplantation"

The Following, DUE \_\_\_\_\_ in the USPTO, was received by the PTO Mail Room on the date stamped hereon

- |   |  |
|---|--|
| <input type="checkbox"/> Cert. of Mailing by Express Mail (37 CFR 1.10)                                   | <input type="checkbox"/> Response to Notice to File Missing Part |
| <input type="checkbox"/> Express Mail Label No. _____   | <input type="checkbox"/> Copy of Part 2 of NFMP                  |
| <input type="checkbox"/> Cert. of Mailing under 37 CFR 1.8(a)   | <input type="checkbox"/> Diskette Containing Nucleotide and/or   |
| <input type="checkbox"/> Patent Application (____ total pgs)  | <input type="checkbox"/> Amino Acid Sequence Listing             |
| <input type="checkbox"/> <input type="checkbox"/> Provisional or <input type="checkbox"/> Non-Provisional | <input type="checkbox"/> Statement under 37CFR § 1.821 (f) and/o |
| <input type="checkbox"/> (____ pgs) Specification, (____ pgs) Abstract,                                   | <input type="checkbox"/> Priority Document(s) # _____            |
| <input type="checkbox"/> (____ pgs) Claims (____ # claims)  | <input type="checkbox"/> Amendment/Response                      |
| <input type="checkbox"/> New Patent Application Transmittal   | <input type="checkbox"/> Amendment Transmittal                   |
| <input type="checkbox"/> Provisional Patent Application Cover Sheet                                       | <input type="checkbox"/> Petition for Extension of Time (x2)     |
| <input type="checkbox"/> Declaration and Power of Attorney  | <input type="checkbox"/> Check in the amount of _____            |
| <input type="checkbox"/> Drawings _____ Sheet(s) (FIGS. _____)  | <input type="checkbox"/> Check # _____                           |
| <input type="checkbox"/> <input type="checkbox"/> Formal or <input type="checkbox"/> Informal             | <input type="checkbox"/> Letter to Official Draftsman            |
| <input type="checkbox"/> Assignment of _____  | <input type="checkbox"/> Motion/Opposition/Reply                 |
| <input type="checkbox"/> Recordation Cover Sheet Form PTO-1595  | <input type="checkbox"/> Request for Cont'd Examination (RCE)    |
| <input type="checkbox"/> Information Disclosure Statement   | <input type="checkbox"/> Notice of Appeal                        |
| <input type="checkbox"/> Form PTO 1449 and Copies of Cited References                                     | <input type="checkbox"/> Issue Fee Transmittal                   |
| <input type="checkbox"/> Oath or Declaration of _____   | <input type="checkbox"/> Transmittal Letter (x2)                 |

☒ Other Request for Corrected Filing Receipt

MAILED 8/27/01